

Notice of Allowability

Application No.

10/521,581

Examiner

Duc C. Ho

Applicant(s)

GERKINS, ANTHONY

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 1-18-05.
2. ☒ The allowed claim(s) is/are 1-4, 10, 9, 5-8, 11-19. Renumbered 1-19, respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 09-07-07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER 'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard P. Bauer on 09-07-07.

The application has been amended as follows:

The abstract of the instant application is provided below:

A novel apparatus, system and method for transmitting data flows having different quality of service (QoS) attributes over a network link structured in two or more channels is provided. The method classifies arriving packets to determine their required/assigned QoS attributes and places the classified packets into one of several logical channel queues, the selected logical channel queue having an appropriate corresponding set of QoS attributes defined. A radio link controller examines the available channels and, for each channel, selects a logical channel queue whose contents will be transmitted thereon. The radio link controller determines the data transmission capacity for each channel and segments the contents of the selected logical channel to fit within the determined capacity. The selection of the logical channel queue is performed in accordance with the set of QoS attributes and thus each flow can have different QoS characteristics including priorities, reliabilities (ARQ, no ARQ, etc.).

Reason for Allowance

2. Regarding claims 1-13, the prior art fails to teach or suggest a method of transmitting at least two data flows over a telecommunications link, wherein each data flow can have a different set of quality of service attributes defined for it, comprising the steps of: (iv) determining a data transmission capacity for said link and selecting one of said plurality of logical channel queues which holds data to be transmitted with the highest, priority for transmission and packaging and transmitting as much data from said logical channel queue as can be packaged to fit within said determined transmission capacity of said channel; and (v) repeating steps (i) through (iii) and step (iv) as necessary, in combination with other limitations, as specified in the independent claims 1, and 15.

Regarding claims 14-19, the prior art fails to teach or suggest a system for the transmission of data flows from a first endpoint to one or more of a plurality of other endpoints through a link where each flow can have different quality of service attributes defined therefor, comprising a link controller which determines the available data transmission capacity to the plurality of end points and which selects for transmission a portion of a packet from the logical channel queue whose contents have the highest priority, the link controller segmenting the packet as necessary to have the portion fit within the data transmission capacity of the link, in combination with other limitations, as specified in the independent claim 14.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner



Duc Ho

09-07-07